



Agency for Healthcare Research and Quality  
Advancing Excellence in Health Care



NATIONAL  
**GUIDELINE**  
CLEARINGHOUSE

## General

### Guideline Title

Adverse events associated with EUS and EUS with FNA.

### Bibliographic Source(s)

ASGE Standards of Practice Committee, Early DS, Acosta RD, Chandrasekhara V, Chathadi KV, Decker GA, Evans JA, Fanelli RD, Fisher DA, Fonkalsrud L, Hwang JH, Jue TL, Khashab MA, Lightdale JR, Muthusamy VR, Pasha SF, Saltzman JR, Sharaf RN, Shergill AK, Cash BD. Adverse events associated with EUS and EUS with FNA. *Gastrointest Endosc*. 2013 Jun;77(6):839-43. [63 references] [PubMed](#)

### Guideline Status

This is the current release of the guideline.

## Recommendations

### Major Recommendations

Adverse events are inherent in the performance of endoscopic ultrasound (EUS) and EUS-fine-needle aspiration (FNA). As these procedures assume larger roles in the management of gastrointestinal (GI) and non-GI disorders, the potential for adverse events will likely increase. Knowledge of potential adverse events secondary to EUS and EUS-FNA, their expected frequency, and their associated risk factors may help to minimize their occurrence. Endoscopists are expected to carefully select patients for the appropriate intervention, be familiar with the planned procedure and available technology, and be prepared to manage any adverse events that may arise. Once an adverse event occurs, early recognition and prompt intervention may minimize the morbidity and mortality associated with that adverse event. Review of adverse events as part of a continuing quality improvement process may serve to educate endoscopists, help to reduce the risk of future adverse events, and improve the overall quality of endoscopy.

### Clinical Algorithm(s)

None provided

## Scope

### Disease/Condition(s)

Diseases and conditions requiring endoscopic ultrasound (EUS) and EUS with fine-needle aspiration (FNA)

## Guideline Category

Management

Prevention

Risk Assessment

## Clinical Specialty

Gastroenterology

Internal Medicine

## Intended Users

Advanced Practice Nurses

Physician Assistants

Physicians

## Guideline Objective(s)

To provide information that may assist endoscopists in providing care to patients undergoing endoscopic ultrasound (EUS) and EUS with fine-needle aspiration (FNA) and increase knowledge of potential adverse events of these procedures

## Target Population

Patients undergoing endoscopic ultrasound (EUS) and EUS with fine-needle aspiration (FNA)

## Interventions and Practices Considered

1. Awareness of potential adverse events associated with endoscopic ultrasound (EUS) and EUS-guided fine-needle aspiration (FNA), their expected frequency, and the risk factors associated with their occurrence
2. Careful patient selection
3. Familiarity with the planned procedure and available technology
4. Preparation for and management of any adverse events
5. Review of complications to reduce future risk and improve overall quality

## Major Outcomes Considered

- Reduction of future adverse events
- Quality improvement

## Methodology

### Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

## Description of Methods Used to Collect/Select the Evidence

A search of the medical literature was performed by using PubMed. Additional references were obtained from the bibliographies of the identified articles and from recommendations of expert consultants. When few or no data exist from well-designed prospective trials, emphasis is given to results of large series and reports from recognized experts.

The time frame for all searches was January 1990 to January 2013.

## Number of Source Documents

Not stated

## Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus

## Rating Scheme for the Strength of the Evidence

Not applicable

## Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

## Description of the Methods Used to Analyze the Evidence

Not stated

## Methods Used to Formulate the Recommendations

Expert Consensus

## Description of Methods Used to Formulate the Recommendations

This document is based on a critical review of the available data and expert consensus at the time that the document was drafted.

## Rating Scheme for the Strength of the Recommendations

Not applicable

## Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

## Method of Guideline Validation

Internal Peer Review

## Description of Method of Guideline Validation

This document was reviewed and approved by the Governing Board of the American Society for Gastrointestinal Endoscopy.

## Evidence Supporting the Recommendations

### Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

## Benefits/Harms of Implementing the Guideline Recommendations

### Potential Benefits

Appropriate understanding of adverse events associated with endoscopic ultrasound (EUS) and EUS with fine-needle aspiration (FNA) may help to reduce the risk of future adverse events and improve the overall quality of endoscopy.

### Potential Harms

Not stated

## Qualifying Statements

### Qualifying Statements

- This document is based on a critical review of the available data and expert consensus at the time that the document was drafted. Further controlled clinical studies may be needed to clarify aspects of this document. This document may be revised as necessary to account for changes in technology, new data, or other aspects of clinical practice.
- This document is intended to be an educational device to provide information that may assist endoscopists in providing care to patients. This document is not a rule and should not be construed as establishing a legal standard of care or as encouraging, advocating, requiring, or discouraging any particular treatment. Clinical decisions in any particular case involve a complex analysis of the patient's condition and available courses of action. Therefore, clinical considerations may lead an endoscopist to take a course of action that varies from this document.

## Implementation of the Guideline

### Description of Implementation Strategy

An implementation strategy was not provided.

# Institute of Medicine (IOM) National Healthcare Quality Report Categories

## IOM Care Need

Getting Better

Living with Illness

Staying Healthy

## IOM Domain

Effectiveness

Safety

## Identifying Information and Availability

### Bibliographic Source(s)

ASGE Standards of Practice Committee, Early DS, Acosta RD, Chandrasekhara V, Chathadi KV, Decker GA, Evans JA, Fanelli RD, Fisher DA, Fonkalsrud L, Hwang JH, Jue TL, Khashab MA, Lightdale JR, Muthusamy VR, Pasha SF, Saltzman JR, Sharaf RN, Shergill AK, Cash BD. Adverse events associated with EUS and EUS with FNA. *Gastrointest Endosc*. 2013 Jun;77(6):839-43. [63 references] [PubMed](#)

### Adaptation

Not applicable: The guideline was not adapted from another source.

### Date Released

2013 Jun

### Guideline Developer(s)

American Society for Gastrointestinal Endoscopy - Medical Specialty Society

### Source(s) of Funding

American Society for Gastrointestinal Endoscopy

### Guideline Committee

Standards of Practice Committee

### Composition of Group That Authored the Guideline

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## Financial Disclosures/Conflicts of Interest

The following authors disclosed a financial relationship relevant to this publication: Dr Fisher, consultant to Epigenomics, Inc; Dr Hwang, consultant to U.S. Endoscopy and speaker for Novartis; Dr Pasha, research support from Capervision. The other authors disclosed no financial relationships relevant to this publication.

## Guideline Status

This is the current release of the guideline.

## Guideline Availability

Electronic copies: Available from the [American Society for Gastrointestinal Endoscopy Web site](#) .

Print copies: Available from the American Society for Gastrointestinal Endoscopy, 1520 Kensington Road, Suite 202, Oak Brook, IL 60523

## Availability of Companion Documents

None available

## Patient Resources

None available

## NGC Status

This NGC summary was completed by ECRI Institute on September 25, 2013.

## Copyright Statement

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